



INTERNAL AUDIT REPORT

Of the

COLLIDER ACCELERATOR DEPARTMENT (C-AD)

and

SUPERCONDUCTING MAGNET DIVISION (SMD)

ENVIRONMENTAL MANAGEMENT SYSTEM (EMS)

and

**OCCUPATIONAL HEALTH and SAFETY MANAGEMENT SYSTEM
(OHSAS)**

Performed by:

Signatures on File

R. Savage, Lead Auditor

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Approved by

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C-AD ESHQ Division Head

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E. Lessard

C-AD ESHQ, Chair

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D. Lowenstein

Collider-Accelerator Department Chairman

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P. Wanderer

Acting Superconducting Magnet Division Head

Date Submitted: June 6, 2006

Audit Dates: May 31 – June 1, 2006

1.0 ASSESSMENT PURPOSE

This internal assessment was conducted to determine whether the Collider-Accelerator Department (C-AD) and the Superconducting Magnet Division (SMD) Environmental Management System (EMS) and Occupational Health and Safety Management System (OH&S) Programs are being implemented in accordance with Environmental Management System 14001- 2004 and Occupational, Health and Safety Management System OHSAS 18001 – 1999 Standards. In addition, this assessment focused on the EMS/OH&S implementation within C-AD and SMD operations and evaluated EMS/OH&S policy awareness processes.

2.0 ASSESSMENT SCOPE

This year the assessment was structured to address all of the 14001 - 2004 (EMS) standard elements and all of the OHSAS 18001 – 1999 elements.

The scope of the audit encompassed an evaluation of the following Collider-Accelerator Department and Superconducting Magnet Division Environmental Management System (EMS) elements:

- a. Environmental Policy (4.2)
- b. Environmental Aspects (4.3.1)
- c. Legal and Other Requirements (4.3.2)
- d. EMS Objectives, Targets and Programmes (4.3.3)
- e. Resources, Roles, Responsibility and Authority (4.4.1)
- f. Competence, Awareness and Training (4.4.2)
- g. EMS Communication (4.4.3)
- h. EMS Documentation (4.4.4)
- i. EMS Control of Documents (4.4.5)
- j. EMS Operational Control (4.4.6)
- k. EMS Emergency Preparedness and Response (4.4.7)
- l. EMS Monitoring and Measurement (4.5.1)
- m. EMS Evaluation of Compliance (4.5.2)
- n. EMS Nonconformity, Corrective Action and Preventive Action (4.5.3)
- o. EMS Control of Records (4.5.4)
- p. EMS Internal Audit (4.5.5)
- q. EMS Management Review (4.6)

In addition, the audit also encompassed an evaluation of the following Occupational Health and Safety Management System (OHSAS) elements:

- a. OH&S Policy (4.2)
- b. Planning for Hazard Identification, Risk Assessment and Risk Control (4.3.1)
- c. Legal and Other Requirements (4.3.2)
- d. OH&S Objectives (4.3.3)
- e. OH&S Management Programs (4.3.4)
- f. Structure and Responsibility (4.4.1)
- g. Training, Awareness and Competence (4.4.2)
- h. OH&S Consultation and Communication (4.4.3)
- i. OH&S Documentation (4.4.4)
- j. OH&S Document and Data Control (4.4.5)
- k. OH&S Operational Control (4.4.6)
- l. OH&S Emergency Preparedness and Response (4.4.7)
- m. OH&S Performance Measurement and Monitoring (4.5.1)
- n. OH&S Accidents, Incidents, Nonconformances, Corrective/Preventive Action (4.5.2)

- o. OH&S Records and Records Management (4.5.3)
- p. OH&S Audit (4.5.4)
- q. OH&S Management Review (4.6)

3.0 SUMMARY

As identified in last years audit, C-AD expanded its Environmental Management Program Description (OPM 1.10.2) and OH&S Management System Program Description, (OPM 1.10.4) to include the Superconducting Magnet Division requirements in accordance with SBMS Procedures Subject Area requirements. This audit of C-AD and SMD was performed to determine if the written programs for each of the eighteen (18) elements identified in 14001 – 2004 and OSHAS-18001-1999 standards are being properly implemented. To achieve this task, each of the elements identified in the scope of this audit were reviewed for compliance, and effectiveness in meeting the EMS and OH&S Policy and Objectives. Based on documents reviewed, the C-A/SMD EMS and OH&S Management System written programs are being implemented in accordance with the SBMS Procedures Subject Area. It should be noted that even though there has been significant organizational changes within the Superconducting Magnet Division since last year, there has been no deviation from the support that management has provided for achieving their EMS and OH&S objectives and targets. The programs are being integrated into everyday activities through Operating Procedures and the Work Planning and Control Processes with the exception of the findings identified below.

In addition, employee representatives from C-AD and SMD who have been appointed to the Worker Occupational Safety and Health (WOSH) Committee have participated as charged with ensuring worker concerns, ideas and inputs related to OH&S are received, considered and responded to by the Committee. WOSH committee member's, group supervisor's and manager's participation in safety meetings and discussions are several of the various avenues being used within C-AD and SMD to communicate OH&S policies, objectives and on-going OH&S related issues to Staff.

As addressed in last year's audit, the overall objective for the EMS and OH&S programs is continual improvement. Both programs are focused on integrating ESSH into their research and daily operations. Employees are involved in the risk analysis process, conserving energy, reducing pollution while focusing on an injury-free workplace. The EMS/OH&S Management Systems have many avenues in which continual improvement is achieved. The results from Management Reviews, hazard and risk assessments, audits, self-assessments, performance monitoring, work-related injury investigations, WOSH Committee recommendations, laboratory Lessons Learned Program or laboratory initiatives and changes in laws or regulations are some of the avenues that provide management with recommendations to improve.

The C-AD/SMD Environmental Management System (EMS) and Occupational Health and Safety (OH&S) Management System elements were reviewed against their respective Program Descriptions and the SBMS Interim Procedure requirements. For the purpose of providing management with the EMS and/or OHSAS element requiring attention each concern will identify the affected element. The following findings represent areas that require management attention in order to fully implement the EMS program in accordance with 14001 – 2004 requirements and OHSAS program in accordance with 18001 – 1999: requirements:

Minor Nonconformance 1: (OHSAS Element 4.3.2) Legal and Other Requirements states that the organization shall establish and maintain a procedure for identifying and accessing the legal and other OH&S requirements that are applicable to it. A review of the C-AD Self-Assessment Plan revealed that it does not address safety objectives under assessment criteria 6: Compliance with Laws, Regulations, and Contractual Requirements.

Minor Nonconformance 2: (EMS Element 4.5.2) Evaluation of Compliance states that the

organization shall establish, implement and maintain a procedure(s) for periodically evaluating compliance with relevant environmental legislation and regulations. C-AD ESHQ tickler card 304 was developed and issued in December 2005 to evaluate compliance corrective action issues. This tickler card was scheduled for completion in March 2006. Contrary to this requirement, this evaluation has not been performed by C-AD QA to date.

Observation 1: (EMS/OHSAS Element 4.3.3) Objectives and Targets states that the organization shall establish and maintain documented environmental/occupational health and safety objectives, at each relevant function and level within the organization. Contrary to this requirement it was discovered that the objectives and targets identified on the C-AD/SMD web page only address C-AD objectives and targets. In addition, the objectives and target handouts that were provided to C-AD/SMD personnel during recent training were also copied from the same C-AD/SMD web page. This web page needs to be revised to reflect both C-AD/SMD objectives and targets.

Observation 2: (OHSAS Element 4.5.2) Accidents, Incidents, Non-Conformances, and Corrective and Preventive Actions states that the organization shall establish and maintain procedures for defining responsibility and authority for the handling and investigation of accidents; incidents; and non-conformances. A review of C-AD OPM 9.4.5 revealed that this procedure identifies accidents as an unexpected event that produces personal injury, illness or death; damage to, or loss of property or vehicles; or environmental occurrences involving reportable quantities of specific substances. However, the procedure only addresses accidents concerning personal injuries and therefore additional clarification is required. In addition, this procedure should also be linked to OPM 10.1 which addresses additional information on Occurrence Reporting and Critique requirements.

Observation 3: (EMS/OHSAS Element 4.5.2/4.5.3) Non-Conformity, Corrective Action and Preventive Action states that the organization shall implement and record any changes in the documented procedures resulting from corrective and preventive actions. It was discovered that there is no process in-place to ensure laboratory level ATS action items resulting from assessments are readily available at the department level for auditing purposes to ensure corrective/preventive actions have been taken. Once a laboratory ATS issue is closed out it is extremely difficult to extract that information without knowing the individual assigned to that action. In addition, this documentation is not maintained in EMS and OSH program files.

Observation 4: (OHSAS Element 4.4.3) Consultation and Communication shall have procedures in-place for ensuring that pertinent OH&S information is communicated to and from employees and other interested parties. The SMD ESH Coordinators bi-monthly tool box meetings has been developed and implemented as an additional format to communicate safety/environmental issues and information to employees in addition to the weekly Group Meetings. Contrary to this in-house goal the last bi-monthly meeting was held on 1/27/06.

Opportunity for Improvement: (EMS Element 4.2) Recently, numerous laboratory Environmental, Safety, Security and Health Policy plaques, dated April 19, 2004 have been installed within various C-AD and SMD facilities without the knowledge of management. It is recommended that C-AD and SMD review their facilities and document the locations of these plaques in case they need to be changed when and if the policy is revised by the laboratory.

4.0 ASSESSMENT RESOLUTIONS

A summary of the assessment and associated findings was presented to the C-AD ES&H/QA management at a close out meeting held June 2, 2005. Nonconformances were addressed. It was agreed that all nonconformances

and observations identified in the Summary (Section 3.0) would be entered into the ATS program and tracked until closure.

5.0 LIST OF ATTACHMENTS

Attachment A – List of Personnel Interviewed

Attachment B – ISO 14001 and OHSAS 18001 Checklist

ATTACHMENT A

List of Personnel Interviewed

J. Durnan
R. Karol
E. Lessard
D. Passarello
C. Porretto

Responsibility

SMD ES&H Coordinator
C-A ESHQ Division Manager
C-A Associate Chair ES&H/QA
C-A QA Manager
SMD QA Manager